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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,422	06/25/2002	Michael Cawthorne	0380-P02754USO	3305

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EXAMINER

DEJONG, ERIC S

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/980,422

Applicant(s)

CAWTHORNE ET AL.

Examiner

Eric S. DeJong

Art Unit

1631

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 July 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see continuation sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: 29.
Claim(s) rejected: 1-3, 5-7, 14-25, 27-33, 52 and 53.
Claim(s) withdrawn from consideration: 34 and 38-51.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

John S. Brusca 5 September 2006
EDJ EIDJ
JOHN S. BRUSCA, PH.D
PRIMARY EXAMINER

Continuation of Item 3. NOTE:

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Applicants proposed After Final amendments to claim 1 would introduce substantive changes that would raise new issues that requiring further consideration and, therefore, will not be entered. The proposed amendment would alter the previous recitation of a "normal or comparatively insulin-sensitive subject" in claim 1 to recite a "normal or insulin-sensitive in comparison to said untreated insulin resistant subject." If entered, a new issue of lack of antecedent basis would be introduced for the limitation of "comparatively insulin-sensitive subject" as recited in claims 5, 14, 16, and 53, which depend from claim 1.

Continuation of Item 11. NOTE:

The rejections and objections set forth in the previous Office action, mailed 04/14/2006, are maintained for reasons of record.

Claim 29 is objected to as the instant claim reads on the non-elected proteins and combinations thereof. If entered, applicants proposed After Final amendment canceling claim 29 would be sufficient to overcome the instant objection.

Claims 1-3, 5-7, 14-25, 27-33, 52, and 53 are rejected under 35 USC 112, second paragraph, as being indefinite. If entered, applicants proposed After Final amendment would be sufficient to overcome the rejection of claims 1-3, 7, 17-25, 27-33, and 52. The After Final amendment would not be sufficient to overcome the instant rejection for claims 5, 6, 14-16, and 53 as claims 5, 14, 16, and 53 still recite the limitation of "comparatively insulin-sensitive subject".

Claims 1-3, 5, 14, 15, 18-20, 27, 28, 33, 52, and 53 are rejected under 35 USC 102(b) as being anticipated by Wang et al.

Claims 1-3, 5, 14, 15, 18-20, 27, 28, 32, 33, 52, and 53 are rejected under 35 USC 103(a) as being unpatentable over Wang et al. in view of Linskens et al.

In regards to the rejection of claims 1-3, 5-7, 14-25, 27-33, 52, and 53 under 35 USC 112, second paragraph, as being indefinite, applicants argue that the proposed amendments claims 1, 5, 16, and 53 has eliminated the any indefiniteness issues.

In response, as indicated above it is noted that the proposed After Final amendment does not include any language of claims 5, 14, 16, and 53. As such, claims 5, 6, 14-16, and 53 still recite the limitation of "comparatively insulin-sensitive subject" and are indefinite for reasons of record.

In regards to the rejection of claims 1-3, 5, 14, 15, 18-20, 27, 28, 33, 52, and 53 under 35 USC 102(b) as being anticipated by Wang et al., applicants argue that Wang et al. does not describe a screening method for identifying agents having efficacy in treating insulin resistance.

In response, it is reiterated from the Final Office action that Wang et al. sets forth that thiazolidinediones enhance insulin action and lower blood glucose in obese, insulin-resistant animals and patients with glucose intolerance or non-insulin-dependent diabetes (see Wang et al., page 1045, col. 1, lines 1-10). Wang et al. further discloses the application of compounds to insulin-sensitive and insulin resistant subject and further measures and characterizes the effects of said compounds on said subject. As such, the methodology as set forth by Wang et al. reads on a screening method as instantly claimed. Further, Wang et al. sets forth the characterization and effect of compounds that have been applied to insulin-sensitive and insulin-resistant subject and arrived at an empirical evaluation of the efficacy of BRL 49653 in Zucker and rat subjects.

Further, the recitation of a screening method for identifying agents having efficacy in treating insulin resistance has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In the instant case, the process steps as claimed stand alone and recitation of "for identifying agents having efficacy in treating insulin resistance" in the preamble is understood as an intended use.

Applicants further argue that Wang et al. does not suggest that a DEP expression pattern, such as recited in applicants' claim 1, would have any practical utility.

In response, it is noted that Wang et al. sets forth that the disclosed study was useful in testing the hypothesis that further over activity of the ARC NPY neurones mediates hyperphagia induced by BRL 49653 in the fa/fa Zucker rat. Applicants further teach that the disclosed methodologies were useful in providing evidence of increased NPY levels in the ARC, PVN, and DMH and of raised NPY mRNA levels, as these changes occur in other states, including starvation and diabetes, in which hyperphagia is thought to be driven by NPY. Wang et al. further teaches that the disclosed methodology was useful in an investigation of a possible role of leptin, insulin, and corticosterone, and lean Zucker and Wistar rats in which thiazolidinediones have much less activity.

Applicants further argue that Wang et al. does not disclose a method in which a fifth biological sample is provided, or in which a determination is made of the effect produced by the agent undergoing a screening on the level of expression of at least DEP in the fifth biological sample, or in which an agent which alters the expression level towards that observed in the second or third biological sample is identified as having efficacy for the treatment of insulin resistance.

In response it is reiterated from the Final Office action that Wang et al. disclosed identified insulin as being differentially expressed between the first and second samples (397.4, +/- 26.8 vs. 32.0, +/- 8.4), differentially expressed between the first and third samples (397.4, +/- 26.8 vs. 297.1, +/- 20.8), but not differentially expressed between the second and forth samples (32.0, +/- 8.4 vs. 28.2, +/- 4.3), which reads on step of identifying at least one differentially expressed protein. In the instant case, the treatment of fatty Zucker rats with BRL 49653 reads on the claimed limitation of providing a fifth biological sample from a subject that has been treated with an agent, as the instant claims do not exclude the embodiment wherein the screened agent may also be the compound that alters insulin

sensitivity. As such, the BRL 49653 compound acts as an agent which alters the expression level of insulin to that observed in the above identified third biological sample.

Applicants further take exception to the contention that claim 1 does not exclude embodiments in which the agent undergoing screening may also be the known compound that alters Insulin sensitivity. In support of applicants contention, applicants cite *In re Bond*, and *In re Baker Hughes, Inc.*, and further provide a definition of screening as a term in the art of drug discovery.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a definition of the term "screening" and that the agent of step d) of claim 1 cannot be the known compound of step a) of claim 1) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the instant case, neither the claims nor the instant specification provide a definition that would exclude the embodiment wherein that the agent of step d) of claim 1 cannot be the known compound of step a) of claim 1.

In regards to the rejection of claims 1-3, 5, 14, 15, 18-20, 27, 28, 32, 33, 52, and 53 under 35 USC 103(a) as being anticipated by Wang et al. in view of Linskens et al., applicants argue that nothing in either Wang et al. or Linskens et al. would motivate one of ordinary skill in the art to combine their disclosures.

In response, it is reiterated from the previous Final Office action that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to employ the high throughput methodology of identifying differentially expressed genes taught by Linskens et al. for isolating and characterizing the differentially expressed proteins identified by Wang et al. because the isolating, characterizing, and high-throughput techniques taught by Linskens et al. are generally applicable to systems comprising differentially expressed genes.

Applicants further argue that the disclosures of Wang et al. and Linskens et al. are entirely unrelated.

In response to applicant's argument that Wang et al. and Linskens et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Wang et al. and Linskens et al. are drawn to isolation and characterization of the differentially expressed genes and related gene products which is within the field of applicants endeavor. Therefore applicants argument is not found persuasive.

Applicants further argue that applicants' disclosure has been used as a guide for combining unrelated prior art teachings in an effort to make out a case of prima facie obviousness.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).